

## ABSTRACT OF THE DISCLOSURE

A system and method are disclosed for noninvasively diagnosing limb compartment syndrome by measuring a quantitative modulus of hardness. In the preferred embodiment, a nonmovable pressure probe mounted in the center of a movable spring loaded platform is applied against a limb compartment. Force is gradually applied to the probe and the platform, compressing a limb compartment. Pressure on the probe is measured as the probe pushes into the limb. The spring loaded platform displaces, and the distance of the probe tip to the platform is measured. This distance is the depth of compression into the limb by the probe. The relationship of incremental pressures in the probe and the corresponding distance of the probe tip to the platform for each pressure is plotted. A linear regression analysis is preformed whose slope forms a quantitative modulus of hardness.

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